



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/810,437	03/19/2001	Tsutomu Matsumoto	010369	7204

23850 7590 12/30/2005

ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP
1725 K STREET, NW
SUITE 1000
WASHINGTON, DC 20006

EXAMINER

SON, LINH L D

ART UNIT	PAPER NUMBER
----------	--------------

2135

DATE MAILED: 12/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/810,437		MATSUMOTO ET AL.	
	Examiner		Art Unit	
	Linh LD Son		2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/21/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. **This Office Action is responding to the RCE received on 10/13/05.**
2. **Claims 1-20 are pending. Claims 1-3, 5, 7, and 11 are amended.**

Claim Rejections - 35 USC § 103

3. **The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:**

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1, 3, 4-6, 9/5, 10/5, 11-15, 16/5, 17/5, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maes et al, US Patent No. 6016476, hereinafter "Maes", in view of Krlarsky, US Publication No. 20010037308.**

5. **As per claims 1 and 3:**

Maes discloses a card settlement method using a mobile information terminal provided with an IC card read/write function (Col 5 lines 25-35) and a wireless communication function for the settlement of a transaction in a business establishment (Col 6 lines 9-27), comprising: a step of having a customer using a business establishment wirelessly connect to an authorization server through a network by the

Art Unit: 2135

mobile information terminal, a step of having the customer load his or her IC card in the mobile information terminal, read the information stored in this IC card, and send it to the authorization server, a step of having the authorization server decide on the authorization of the current transaction from authentication information stored in the IC card and proving the legitimacy of the card, settlement information containing at least a card number, and personal identification information input from the customer and proving the legitimacy of the customer, a step of sending a temporary password issued from a settlement server to the mobile information terminal for display after the authorization of the current transaction (Col 6 line 56 to Col 7 line 35) (Temporary password is the digital certificate), a step of inputting the temporary password and the current transaction information from a business establishment side settlement terminal and sending it to the settlement server, and a step of having the settlement server settle the transaction with the password and the transaction information satisfying the settlement conditions (Col 15 lines 1-25), wherein the temporary password is valid for only a limited period of time (Col 10 lines 1-10); and further the settlement of a transaction in a business establishment is carried out directly by the customer's mobile information terminal (Col 15 lines 1-25). "Wherein the mobile information terminal is a mobile phone having a contact type IC card built into the mobile telephone." In (Col 5 lines 25-35 and Col 14 lines 1-16)

However, Maes is silent on the temporary password is valid for only one transaction. Nevertheless, Kotlarsky disclose the temporary password is valid for only one transaction in (See abstract). Therefore, it would have been obvious at the time of the

Art Unit: 2135

invention was made for one having ordinary skill in the art to modify Maes' invention to implement the one-time use certificate in Kotlarsky's invention as a password to provide a unique authentication for every transaction.

6. As per claim 4:

Maes discloses a card settlement system using a mobile information terminal as set forth in either one of claims 1 to 3, wherein, further, after said settlement is executed by said settlement server, a receipt is issued from said settlement terminal on business establishment side (Col 11 lines 41-45).

7. As per claims 5, and 11:

Maes discloses a card settlement system wherein a settlement terminal installed in a business establishment is connected through a settlement network with an authorization server and a settlement server retained by a card company or a bank (Col 6 lines 61-67, and Col 14 lines 61-62), and a customer can perform the settlement by using a card, providing following means of: an application server provided in the mobile information terminal, and providing a read/write function of an IC card for performing a read/write operation of information with respect to the IC card with authentication information proving a legitimacy of the card, personal identification information proving the legitimacy of the customer and settlement information containing at least a card number stored therein, a storage of an application software for a specific service (Col 5 line 24), a control of a screen of said mobile information terminal and a gateway function between the network of said mobile information terminal and said settlement network,

Art Unit: 2135

and a password issuance function provided in said settlement server issuing a temporary password based on settlement information input from said IC card through the network of said mobile information terminal, said application server and said settlement network (Col 6 line 56 to Col 7 line 35); wherein the temporary password is valid for only a limited period of time (Col 10 lines 1-10). "Wherein the mobile information terminal is a mobile phone having a contact type IC card built into the mobile telephone." In (Col 5 lines 25-35 and Col 14 lines 1-16)

However, Maes is silent on the temporary password is valid for only one transaction.

Nevertheless, Kotlarsky disclose the temporary password is valid for only one transaction in (See abstract).

Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to modify Maes' invention to implement the one-time use certificate in Kotlarsky's invention as a password to provide a unique authentication for every transaction.

8. As per claims 6, and 12:

Maes discloses a card settlement system using a mobile information terminal as set forth in claim 5, wherein the settlement is carried out by the following procedure when a customer incurs a charge at a business establishment: said mobile information terminal with said IC card inserted therein by the customer is connected via said application server with said authorization server, and the authentication information stored in this IC card is transmitted to said authorization server, legitimacy of this IC

Art Unit: 2135

card is decided by said authorization server based on the authentication information stored in said IC card, the personal identification information is input from the input device of said mobile information terminal by the customer and sent to said authorization server after it is verified that said card is legitimate, the settlement information stored in said IC card is input by the customer and sent to said settlement server after the customer is verified by the personal identification information, a temporary password issued from said settlement server based on said personal identification information, settlement information, and reception time is sent to said mobile information terminal and displayed on a display unit thereof (Col 6 line 56 to Col 7 line 56), the displayed temporary password and this time sales information are input from said settlement terminal installed in said business establishment (Col 14 lines 47-67), and a receipt is issued from said settlement terminal of the business establishment by a signal (Col 11 lines 42-45) from said settlement server for a transaction satisfying the settlement conditions after said temporary password and transaction information are checked by said settlement server (Col 15 lines 1-25).

9. As per claim 9/5:

Maes discloses a card settlement system using a mobile information terminal as set forth in claim 5, wherein said application server is provided in a service center located between the network of said mobile information terminal and said settlement network, and said authorization server is provided in this service center (Col 8 lines 1-11).

10. As per claim 10/5:

Maes discloses a card settlement system using a mobile information terminal as set forth in claim 5, wherein the authentication function corresponding to said authorization server is provided in said mobile information terminal, and the authentication of legitimacy of said IC card is carried out in said mobile information terminal (Col 7 lines 5-18).

11. As per claim 13:

Maes discloses a card settlement system using a mobile information terminal as set forth in claim 12, wherein an application server is provided between said settlement network and said settlement terminal, and said authorization server is installed in this application server (Col 6 lines 60-67).

12. As per claim 14:

Maes discloses a card settlement system using a mobile information terminal as set forth in claim 11, wherein one said settlement terminal can simultaneously execute settlement processing with a plurality of mobile information terminals via said wireless mobile. It is implicit that the settlement terminal can simultaneously execute settlement processing with many mobile information terminals.

13. As per claim 15:

Maes discloses a card settlement system using a mobile information terminal as set forth in claim 4, wherein when the receipt is issued from said settlement terminal of a business establishment by said settlement server, the settlement result is displayed

on also a display unit of said mobile information terminal via said application server (Col 5 lines 36-43, Col 11 lines 41-45, and Col 11 lines 58-65).

14. As per claim 16/5:

Maes discloses a card settlement system using a mobile information terminal as set forth in any one of claims 5 or 8, wherein as the authentication of the user by said personal identification information, bio information such as a fingerprint, voiceprint, and retina print of the user is registered in the IC card in advance by a bio information reader, the bio information is read at the time of authentication of the user by this bio information reader and compared with the bio information in the IC card, and the user is thereby verified (Col 5 lines 55-67).

15. As per claim 17/5:

Maes discloses a card settlement system using a mobile information terminal as set forth in any one of claims 5, wherein specific information concerning a matter known to only the user is registered in the IC card in advance as the authentication of the user by said personal identification information, the user inputs this specific information at the time of authentication of the user, this is compared with the specific information in the IC card, and the user is thereby verified (Col 7 lines 1-15).

16. As per claim 18:

Maes discloses a card settlement system using a mobile information terminal as set forth in claim 5, wherein a read/write function of the IC card is externally given to said mobile information terminal (Col 6 lines 1-5, and Col 6 lines 35-40).

17. As per claim 19:

Maes discloses a card settlement system using a mobile information terminal as set forth in claim 5, wherein a read/write function of the IC card is built-in said mobile information terminal (Col 5 lines 25-35).

18. As per claim 20:

Maes discloses a card settlement system using mobile information terminal as set forth in claim 5, wherein said mobile information terminal is a mobile telephone (Col 14 lines 12-16).

19. Claims 2, 7-8, 9/7, 10/7, 16/8, 12, 17/8, 16/(8,12), and 17/(8,12) are rejected under 35 U.S.C. 103(a) as being unpatentable over Maes et al, US Patent No. 6016476, hereinafter "Maes", in view of Shkedy, US Patent No. 6260024.

20. As per claim 2:

Maes discloses a card settlement method using a mobile information terminal provided with an IC card read/write function (Col 5 lines 25-35) and a wireless communication function for the settlement of a transaction in a business establishment (Col 6 lines 9-27), comprising: a step of having a customer using a business establishment wirelessly connect with an authorization server through a network by the mobile information terminal, a step of having the customer load his or her IC card and a business establishment IC card provided in the business establishment in the mobile information terminal, read the information stored in these IC cards, and send it to the authorization server, a step of having the authorization server decide on legitimacy of

Art Unit: 2135

these IC cards from authentication information stored in the IC card of the customer (Col 6 lines 56 to Col 7 lines 35) and proving legitimacy of the customer and business establishment information stored in the business establishment IC card and specifying the business establishment (Col 14 lines 47-67) (The fact that user B (Business establishment) also go through enrollment (Col 14 lines 60-61)), a step of having the authorization server authenticate the customer from personal identification information input from the customer and proving the legitimacy of the customer after these IC cards are authenticated (Col 7 lines 1-19), a step of having the settlement server decide on authorization of the current transaction by settlement information stored in the IC card of the customer and containing at least a card number (Col 7 lines 1-19), and current transaction information input by the customer after the customer is authenticated, and a step of having the settlement server settle the transaction where it is decided that the current transaction satisfies the settlement conditions (Col 14 line 47- Col 15 line 25). Maes further discloses the process of utilizing the transaction code to settle the transaction (Col 15 lines 1-25). "Wherein the mobile information terminal is a mobile phone having a contact type IC card built into the mobile telephone." In (Col 5 lines 25-35 and Col 14 lines 1-16)

However, Maes is silent on "the settlement of a transaction in a business establishment is carried out through a settlement network after the authorization of the mobile information terminal by the business establishment IC card and the authorization of the customer by the customer's IC card".

Nevertheless, Shkedy discloses the "Method and Apparatus for Facilitating Buyer-Driven Purchase Orders on a Commercial Network System" invention, which teaches the method silent in Maes' invention in (Col 3 lines 22-28, Col 12 lines 5-18, and Col 19 lines 55-65).

Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to incorporate Shkedy's method with Maes to provide additional security for the transaction and may further preventing fraudulent.

21. As per claims 7:

Maes discloses a card settlement system wherein a settlement terminal installed in a business establishment is connected through a settlement network with an authorization server and a settlement server retained by a card company or a bank (Col 6 lines 61-67, and Col 14 lines 61-62), and a customer can perform the settlement by using a card, providing following means of: an application server provided in the mobile information terminal, and providing a read/write function of an IC card for performing a read/write operation of information with respect to the IC card with authentication information proving a legitimacy of the card, personal identification information proving the legitimacy of the customer and settlement information containing at least a card number stored therein, a storage of an application software for a specific service (Col 5 line 24), a control of a screen of said mobile information terminal and a gateway function between the network of said mobile information terminal and said settlement network, and a password issuance function provided in said settlement server issuing a temporary password based on settlement information input from said IC card through

Art Unit: 2135

the network of said mobile information terminal, said application server and said settlement network (Col 6 line 56 to Col 7 line 35). Maes further discloses the process of utilizing the transaction code to settle the transaction (Col 15 lines 1-25). “Wherein the mobile information terminal is a mobile phone having a contact type IC card built into the mobile telephone.” In (Col 5 lines 25-35 and Col 14 lines 1-16)

However, Maes is silent on “the settlement of a transaction in a business establishment is carried out through a settlement network after the authorization of the mobile information terminal by the business establishment IC card and the authorization of the customer by the customer's IC card”.

Nevertheless, Shkedy discloses the “Method and Apparatus for Facilitating Buyer-Driven Purchase Orders on a Commercial Network System” invention, which teaches the method silent in Maes’ invention in (Col 3 lines 22-28, Col 12 lines 5-18, and Col 19 lines 55-65).

Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to incorporate Shkedy’s method with Maes to provide additional security for the transaction and may further preventing fraudulent.

22. As per claim 8:

Maes discloses a card settlement system using a mobile information terminal as set forth in claim 5, wherein the settlement is carried out by the following procedure when a customer incurs a charge at a business establishment: said mobile information terminal with said IC card inserted therein by the customer is connected via said application server with said authorization server, and the authentication information

stored in this IC card is transmitted to said authorization server, legitimacy of this IC card is decided by said authorization server based on the authentication information stored in said IC card, the personal identification information is input from the input device of said mobile information terminal by the customer and sent to said authorization server after it is verified that said card is legitimate, the settlement information stored in said IC card is input by the customer and sent to said settlement server after the customer is verified by the personal identification information, a temporary password issued from said settlement server based on said personal identification information, settlement information, and reception time is sent to said mobile information terminal and displayed on a display unit thereof (Col 6 line 56 to Col 7 line 56), the displayed temporary password and this time sales information are input from said settlement terminal installed in said business establishment (Col 14 lines 47-67), and a receipt is issued from said settlement terminal of the business establishment by a signal (Col 11 lines 42-45) from said settlement server for a transaction satisfying the settlement conditions after said temporary password and transaction information are checked by said settlement server (Col 15 lines 1-25).

23. As per claim 9/7:

Maes discloses a card settlement system using a mobile information terminal as set forth in claim 7, wherein said application server is provided in a service center located between the network of said mobile information terminal and said settlement network, and said authorization server is provided in this service center (Col 8 lines 1-11).

24. As per claim 10/7:

Maes discloses a card settlement system using a mobile information terminal as set forth in claim 7, wherein the authentication function corresponding to said authorization server is provided in said mobile information terminal, and the authentication of legitimacy of said IC card is carried out in said mobile information terminal (Col 7 lines 5-18).

25. As per claim 16/(8,12):

Maes discloses a card settlement system using a mobile information terminal as set forth in any one of claims 8,^{or 12} wherein as the authentication of the user by said personal identification information, bio information such as a fingerprint, voiceprint, and retina print of the user is registered in the IC card in advance by a bio information reader, the bio information is read at the time of authentication of the user by this bio information reader and compared with the bio information in the IC card, and the user is thereby verified (Col 5 lines 55-67).

26. As per claim 17/(8,12):

Maes discloses a card settlement system using a mobile information terminal as set forth in any one of claim 8,^{or 12} wherein specific information concerning a matter known to only the user is registered in the IC card in advance as the authentication of the user by said personal identification information, the user inputs this specific information at the

Art Unit: 2135

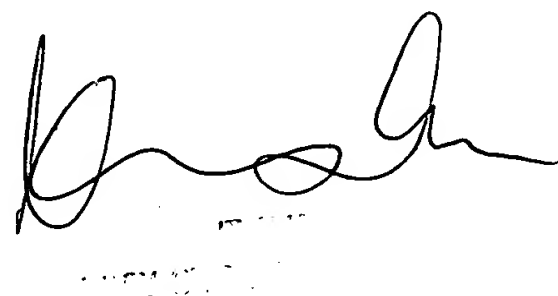
time of authentication of the user, this is compared with the specific information in the IC card, and the user is thereby verified (Col 7 lines 1-15).

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh LD Son whose telephone number is 571-272-3856. The examiner can normally be reached on 9-6 (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Linh LD Son
Examiner
Art Unit 2135

A handwritten signature in black ink, appearing to read 'Linh LD Son', is written over a faint, illegible stamp.